

Claims

What is claimed is:

1 1. A broadcast system for distributing product data,  
2 comprising:

3 a broadcast station configured to broadcast  
4 information, including video programming and a plurality of  
5 program identifiers, each program identifier being uniquely  
6 associated with a segment of the video programming; and

7 a plurality of user stations, each configured to  
8 receive the broadcast information and to transmit a first  
9 product related request including the one unique identifier  
10 corresponding to the programming segment to which the first  
11 product request relates;

12 wherein the broadcast station is further configured to  
13 receive the first product request, and, in response, to  
14 transmit to the user station from which the first product  
15 related request was received, first product data identified  
16 based on the one unique identifier included in the first  
17 product request.

1 2. A system according to claim 1, wherein the first  
2 product request relates to the programming segment being  
3 received by the user station at the time the first product  
4 request is transmitted.

1 3. A system according to claim 1, wherein the first  
2 product related request is transmitted in response to a  
3 first user input, and further comprising:

4 an input device configured to communicate the first  
5 user input to the user station.

1 4. A system according to claim 1, wherein the broadcast  
2 station is further configured to further transmit the  
3 received first product request, and further comprising:

4 a system server configured to receive the first  
5 product request, to retrieve the first product data from a  
6 database using the one unique identifier, and to transmit  
7 the first product data to the broadcast station.

1 5. A system according to claim 1, wherein the first  
2 product data includes a list identifying one or more  
3 products, and the user station is further configured to  
4 display the product list.

1 6. A system according to claim 5, wherein the first  
2 product data includes a screen display definition and the  
3 user station is further configured to display the product  
4 list in accordance with the screen display definition.

1 7. A system according to claim 6, wherein:

2 the first product data is one of a plurality of first  
3 product data, each corresponding to one of the plurality of  
4 unique identifiers, and each including one of a plurality  
5 of screen display definitions; and

6 a second of the plurality of first product data  
7 includes a second of the plurality of screen display  
8 definitions that is different from the first of the  
9 plurality of screen display definitions.

1 8. A system according to claim 1 wherein the user station  
2 is further configured to display the first product data  
3 simultaneously with the video programming.

1 9. A system according to claim 1, wherein the user  
2 station is further configured to display, in response to  
3 receipt of the one unique identifier, notification of  
4 availability of the first product data.

1 10. A system according to claim 9, wherein the  
2 notification of availability is in the form of an icon  
3 displayed simultaneously with the video programming.

1 11. A system according to claim 1, wherein:  
2 each of the plurality of user stations is further  
3 configured to transmit a second product request based on a  
4 second user input responsive to the received first product  
5 data; and  
6 the broadcast station is further configured to receive  
7 the second product request, and, in response, to transmit  
8 second product data to the user station.

1 12. A system according to claim 11, wherein the second  
2 product data is at least one of (i) product attribute  
3 information, and (ii) product purchase information.

1 13. A system according to claim 11, wherein the second  
2 product data is displayed simultaneously with the video  
3 programming.

1 14. A system according to claim 11, further comprising:  
2 an input device configured to communicate the second  
3 user input to the user station.

1 15. A system according to claim 1, wherein the broadcast  
2 station is further configured to broadcast the plurality of  
3 unique identifiers via an in-band data path.

1 16. A system according to claim 1, wherein the video  
2 programming is broadcast in an analog format having a  
3 vertical blanking interval, and the plurality of unique  
4 identifiers is broadcast in the vertical blanking interval.

1 17. A method of distributing product related data over a  
2 broadcast system, comprising:

3 broadcasting, over the broadcast system, information  
4 including video programming and a plurality of programming  
5 identifiers, each of the programming identifiers being  
6 uniquely associated with a segment of the video  
7 programming;

8 receiving, via the broadcast system, a first product  
9 request including the one unique identifier corresponding  
10 to the programming segment to which the first product  
11 request relates; and

12 transmitting via the broadcast system, first product  
13 data identified based on the one unique identifier included  
14 in the first product request;

15 wherein the broadcast information is broadcast to a  
16 plurality of user stations, the first product request is  
17 received from one of the plurality of user stations, and

18 the first product data is transmitted to the one user  
19 station from which the first product request was received.

1 18. A method according to claim 17, wherein the first  
2 product request relates to the programming segment being  
3 received by the user station at the time the first product  
4 request is transmitted.

1 19. A method according to claim 17, wherein the first  
2 product data transmitted to the one user station is on a  
3 database, and further comprising:

4 retrieving the first product data from the database  
5 using the one unique identifier.

1 20. A method according to claim 16, wherein the first  
2 product information includes a list identifying one or more  
3 products, and further comprising:

4 displaying the product list at the user station.

1 21. A method according to claim 20, wherein the first  
2 product information includes a screen display definition,  
3 and further comprising:

4 displaying the product list at the user station in  
5 accordance with the screen display definition.

1 22. A method according to claim 21, wherein:

2 the first product data is one of a plurality of first  
3 product data, each corresponding to one of the plurality of  
4 unique identifiers, and each including one of a plurality  
5 of screen display definitions; and

6 a second of the plurality of first product data  
7 includes a second of the plurality of screen display  
8 definitions that is different from the first of the  
9 plurality of screen display definitions.

1 23. A method according to claim 17, further comprising:  
2 displaying the first product data at the user station  
3 simultaneously with the video programming.

1 24. A method according to claim 17, further comprising:  
2 displaying at the user station, in response to the one  
3 unique identifier, notification of availability of the  
4 first product data.

1 25. A method according to claim 24, wherein the  
2 notification is in the form of an icon displayed  
3 simultaneously with the video programming.

1 26. A method according to claim 17, further comprising:  
2 receiving a second product request from the one user  
3 station in response to the first product data; and  
4 transmitting, in response, second product data to the  
5 user station.

1 27. A method according to claim 26, wherein the second  
2 product data is at least one of (i) product attribute  
3 information, and (ii) product purchase information.

1 28. A method according to claim 26, further comprising:

2 displaying the second product data at the user station  
3 simultaneously with the video programming.

1 29. A method according to claim 26, wherein the second  
2 product request is based on a second user input to the user  
3 station.

1 30. A method according to claim 17, wherein the first  
2 product request is based on a first user input to the user  
3 station.

1 31. A method according to claim 17, wherein the  
2 broadcasting of the plurality of unique identifiers is via  
3 an in-band data path.

1 32. A method according to claim 17, wherein the video  
2 programming is broadcast in an analog format having a  
3 vertical blanking interval, and the plurality of unique  
4 identifiers is broadcast in the vertical blanking interval.

1 33. A broadcast programming user station, comprising:  
2 a tuner configured to tune to any one of multiple  
3 broadcast video channels to receive broadcast information,  
4 including video programming and a plurality of programming  
5 identifiers, each program identifier being uniquely  
6 associated with a segment of the video programming;  
7 a display screen configured to display the video  
8 programming; and

9 a processor configured to generate a product request  
10 including the one unique identifier corresponding to the  
11 programming segment to which the product request relates;  
12 wherein the tuner is further configured to transmit  
13 the product request.

1 34. A user station according to claim 33, wherein the  
2 product request relates to the programming segment to which  
3 the tuner is tuned at the time the product request is  
4 transmitted.

1 35. A user station according to claim 33, wherein:  
2 the processor is further configured to direct, upon  
3 receipt of the one unique identifier, simultaneous display  
4 of an icon with the video programming, the icon being  
5 indicative of availability of product information; and  
6 the display screen is further configured to display,  
7 in accordance with the direction of the processor, the icon  
8 simultaneously with the display of the video programming.

1 36. A user station according to claim 33, wherein the  
2 processor is further configured to generate the product  
3 request in response to a user input, and further  
4 comprising:  
5 an input device configured to communicate the user  
6 input to the processor.

1 37. A user station according to claim 36, wherein the  
2 input device is a television remote control.



1 38. A user station according to claim to 33, wherein:

2 the tuner is further configured to receive product  
3 data identified based on the one unique identifier included  
4 in the product request, the product data having been  
5 transmitted to the user station in response to the product  
6 request;

7 the processor is further configured to process the  
8 received product data and to direct a simultaneous display  
9 of the received product data with the video programming;  
10 and

11 the display screen is further configured, in  
12 accordance with the direction of the processor, to  
13 simultaneously display the received product data with the  
14 video programming.

1 39. A user station according to claim 38, wherein the  
2 product data includes a listing identifying one or more  
3 products.

1 40. A user station according to claim 38, wherein the  
2 product data includes at least one of (i) product attribute  
3 information, and (ii) product purchase information.

1 41. A user station according to claim 38, wherein the  
2 product related information is received via one of an in-  
3 band path and an out-of-band data path.

1 42. A user station according to claim 38, wherein the  
2 processor is further configured to direct the simultaneous

3 display of the received product data with the video  
4 programming, based on a user input, and further comprising:  
5 an input device configured to communicate the user  
6 input to the processor.

1 43. A user station according to claim 42, wherein the  
2 input device is a television remote control.

1 44. A user station according to claim 38, wherein the  
2 product data includes a screen display definition and the  
3 processor is further configured to display the product data  
4 in accordance with the screen display definition.

1 45. A user station according to claim 33, wherein the  
2 plurality of program identifiers is received via an in-band  
3 data path.

1 46. A user station according to claim 33, wherein the  
2 video programming is broadcast in an analog format having a  
3 vertical blanking interval, and the plurality of unique  
4 identifiers is broadcast in the vertical blanking interval.

1 47. A user station according to claim 33, wherein the  
2 tuner and the processor are housed in a television set top  
3 box.